

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all previous listing of claims.

1. (Cancelled)

2. (Currently Amended) A remote management system for managing serial devices each having a serial interface, remote servers having keyboard, video, and mouse ("KVM") interfaces, and ~~one or more~~ remote power supplies each having a power supply interface, comprising:

a computer workstation including a keyboard, cursor control device and video display;

~~at least one remote server including "KVM" interface;~~

~~at least one remote serial device including a serial interface;~~

a remote management unit coupled to said computer workstation and containing at least [[a]] one KVM interface for connecting to [[said]] the KVM interface of at least one of said remote ~~servers~~ server, a serial interface for directly connecting to [[said]] the serial interface of at least one of said remote serial ~~devices~~ device and a power ~~port~~ interface for connecting to [[said]] the power supply interface of at least one of said remote power supplies, and at least one option menu circuit; and

communication means for providing bi-directional communication between said remote management unit and said computer workstation, ~~and~~

wherein said remote management unit is configured to selectively provide enables ~~switching said communications between to and from~~ said computer workstation and between said at least one remote server, said at least one remote serial device and said at least one remote power supply, and

wherein said at least one option menu circuit is configured to generate a multi-window option menu for display on said video display, said multi-window option menu including at least a device window for selecting ones of the at least one remote server and at least one remote serial device, a remote server window for controlling a selected one of the at least one remote server, a power control window for selecting and controlling ones of the at least one remote power supply,

and a remote serial device window for controlling a selected one of the at least one remote serial device KVM interface, said serial interface and said power interface.

3. (Currently Amended) A system according to claim 2, wherein said at least one remote workstation controls the power supply is coupled to at least one of said at least one remote server device or one of said at least one remote serial device, and said computer workstation is configured to control said at least one remote power supply via said power port through said power interface of said remote management unit.

4. (Previously Presented) A system according to claim 2, wherein access to said remote management unit by said workstation is controlled by unique user passwords or authentication information and wherein said remote management unit stores profile information for an authorized user comprising a list of said remote devices and said remote serial devices accessible to said authorized user.

5. (Previously Presented) A system according to claim 2, wherein said remote management unit includes at least one redundant power supply.

6. (Canceled).

7. (Canceled).

8. (Previously Presented) A system according to claim 2, wherein said remote management unit includes at least one header circuit for selective communication between at least one KVM port of said remote management unit and at least one video port of said at least one remote server.

9. (Previously Presented) A system according to claim 8, wherein said header circuit includes a video switch, and at least one receiver transmitter circuit, wherein said receiver transmitter circuit converts parallel and serial signals.

10. (Previously Presented) A system according to claim 2, wherein said remote management unit includes at least one frame grabber circuit for digitizing video signals.

11. (Previously Presented) A system according to claim 10, wherein said frame grabber circuit converts analog video signals to digital video signals.

12. (Previously Presented) A system according to claim 2, wherein said remote management unit includes a frame grabber circuit for correcting an image produced by said video signals.

13. (Previously Presented) A system according to claim 2, wherein said remote management unit includes at least one local KVM port.

14. (Previously Presented) A system according to claim 2, wherein said remote management unit includes at least one video processor circuit for compressing video signals.

15. (Previously Presented) A system according to claim 14, wherein said video processor circuit includes at least one video receiving circuit for receiving video signals from at least one CPU.

16. (Previously Presented) A system according to claim 14, wherein said video processor circuit includes at least one pixel pusher circuit for storing red, green and blue video signal components of said video signals.

17. (Previously Presented) A system according to claim 15, wherein said video processor circuit includes at least one frame buffer circuit for storing video frames indicative of said video signals.

18. (Previously Presented) A system according to claim 14, wherein said video processor circuit compresses video signals using Joint Bi-level Image experts Group (JBIG) compression.

19. (Previously Presented) A system according to claim 15, wherein said video processor circuit includes at least one microprocessor for controlling at least one of a frame buffer circuit, pixel pusher circuit and JBIG compression.

20. (Previously Presented) A system according to claim 19, wherein said video processor circuit includes at least one memory circuit coupled to said microprocessor for storing data.

21. (Previously Presented) A system according to claim 14, wherein said video processor circuit includes at least one switch for outputting video signals.

22. (Previously Presented) A system according to claim 2, wherein said remote management unit includes at least one modem module for demodulating signals received by a modem.

23. (Previously Presented) A system according to claim 2, wherein said communication means is selected from the group consisting of a LAN, a WAN, a wireless connection, a modem, a direct modem connection, and the Internet.

24. (Previously Presented) A system according to claim 2, wherein said remote management unit includes reset circuitry controllable by said workstation for resetting said remote management unit.

25. (Currently Amended) An apparatus for coupling a computer workstation to one or more remote servers, one or more remote serial devices, and one or more remote power supplies, said apparatus comprising:

a communication circuit for transmitting signals to and receiving signals from said computer workstation via a communication medium;

a serial communication circuit for transmitting serial data to and receiving serial data signals from one or more of said remote serial devices;

a keyboard, video, mouse ("KVM") circuit for transmitting and receiving KVM signals from one or more of said remote servers;

a power circuit for transmitting and receiving signals from one or more of said remote power supplies; and

a central processing circuit for controlling transmission of said signals between at least one said communication circuit[,], and each of said power circuit, said serial communication circuit and said KVM circuit; and

an option menu circuit,

wherein said option menu circuit is configured to generate a multi-window option menu for display on a video display of said computer workstation, said multi-window option menu including at least a device window for selecting ones of the one or more remote servers and at least one of the one or more remote serial devices, a remote server window for controlling a selected one of the one or more remote servers, a power control window for selecting and controlling ones of the one or more remote power supplies, and a remote serial device window for controlling a selected one of the one or more remote serial devices.

26. (Currently Amended) An apparatus according to claim 25, wherein said one or more remote servers and said one or more remote serial devices are each powered by a power source.

27. (Currently Amended) An apparatus according to claim 26, wherein said apparatus is connected to said power sources ~~for said one or more remote server and one or more remote serial device.~~

28. (Currently Amended) An apparatus according to claim 27, wherein said computer workstation controls said ~~one or more remote server and one or more remote serial device~~ power sources through said apparatus.

29. (Currently Amended) An apparatus according to claim 28, wherein access to said apparatus by said computer workstation is controlled by unique user passwords or authentication information and

wherein said apparatus stores profile information for an authorized user comprising a list of said remote devices and said remote serial devices accessible to said authorized user.

30. (Previously Presented) An apparatus according to claim 25, wherein said apparatus includes at least one redundant power supply.

31. (Canceled).

32. (Canceled).

33. (Previously Presented) An apparatus according to claim 25, wherein said apparatus includes at least one header circuit for selective communication between at least one KVM port and at least one video port of said remote servers.

34. (Previously Presented) A apparatus according to claim 33, wherein said header circuit includes a video switch, and at least one receiver transmitter circuit, wherein said receiver transmitter circuit converts parallel and serial signals.

35. (Previously Presented) An apparatus according to claim 25, wherein said apparatus includes at least one frame grabber circuit for digitizing and correcting images produced by video signals.

36. (Previously Presented) An apparatus according to claim 35, wherein said frame grabber circuit converts analog video signals to digital video signals.

37. (Previously Presented) An apparatus according to claim 25, wherein said apparatus includes at least one local KVM port.

38. (Previously Presented) An apparatus according to claim 25, wherein said apparatus includes at least one video processor circuit for compressing video signals.

39. (Previously Presented) An apparatus according to claim 38, wherein said video processor circuit includes at least one circuit to receive video signals from said central processing circuit.

40. (Previously Presented) An apparatus according to claim 39, wherein said video processor circuit includes at least one pixel pusher circuit for storing red, green and blue video signal components of said video signals.

41. (Previously Presented) An apparatus according to claim 38, wherein said video processor circuit includes at least one frame buffer circuit for storing video frames indicative of said video signals.

42. (Previously Presented) An apparatus according to claim 38, wherein said video processor circuit compresses video signals using JBIG compression.

43. (Previously Presented) An apparatus according to claim 38, wherein said video processor circuit includes at least one memory circuit for use by a microprocessor for controlling at least one of a frame buffer circuit, pixel pusher circuit and JBIG compression.

44. (Previously Presented) An apparatus according to claim 38, wherein said video processor circuit includes at least one switch for outputting signals to an Ethernet port or a modem port.

45. (Previously Presented) An apparatus according to claim 25, wherein said apparatus includes at least one modem module for demodulating signals received by modem.

46. (Previously Presented) An apparatus according to claim 25, wherein said communication medium is at least one selected from the group consisting of a LAN, a WAN, a wireless connection, a modem, a direct modem connection, and the Internet.

47. (Previously Presented) An apparatus according to claim 25, wherein said signals transmitted and received by said workstation are at least one control signal selected from the group consisting of keyboard, video, mouse, serial or power.

48. (Previously Presented) An apparatus according to claim 25, wherein said apparatus includes a reset circuit for resetting said apparatus.